

## CLAIMS

What is claimed is:

1. A method comprising:  
processing at least one control unit to retrieve communication information related to data received along at least one communication link in a network;

storing said at least one control unit in at least one buffer; and  
processing said at least one control unit to retrieve link information related to said at least one communication link.

2. The method according to claim 1, further comprising:  
receiving said at least one control unit after each frame of a plurality of frames of said data received along said at least one communication link.

3. The method according to claim 1, wherein said at least one control unit is a control protocol cell.

4. The method according to claim 2, wherein said processing to retrieve said communication information further comprises:

retrieving frame information related to said each frame of said plurality of frames of said data;  
retrieving delay information related to said at least one communication link; and

creating a delay profile in said at least one buffer using said delay information.

5. The method according to claim 2, wherein said each frame further comprises a predetermined number of data units.
6. The method according to claim 5, wherein each data unit of said predetermined number of data units is a data cell.
7. The method according to claim 1, wherein said buffer is a delay compensated buffer.
8. The method according to claim 1, wherein said processing to retrieve said link information further comprises:  
retrieving said link information after a predetermined period of time determined in a delay profile of said buffer.
9. The method according to claim 4, wherein said processing to retrieve said link information further comprises:  
retrieving said link information after a predetermined period of time determined in said delay profile of said buffer.

10. The method according to claim 8, wherein said link information further comprises information related to deletion of said at least one communication link.

11. The method according to claim 1, wherein said network is an Asynchronous Transfer Mode (ATM) communication network.

12. The method according to claim 1, wherein said at least one communication link is a T1 communication link.

13. The method according to claim 1, wherein said at least one communication link is an E1 communication link.

14. The method according to claim 11, wherein said network enables communication according to an Inverse Multiplexing Asynchronous Transfer Mode (IMA) communication protocol.

~~15.~~ A system comprising:

at least one communication processing module for processing at least one control unit to retrieve communication information related to data received along at least one communication link in a network;

at least one buffer coupled to said at least one communication processing module for storing said at least one control unit; and

a state processing module coupled to said at least one buffer for processing said at least one control unit to retrieve link information related to said at least one communication link.

16. The system according to claim 15, wherein said at least one communication processing module further receives said at least one control unit after each frame of a plurality of frames of said data received along said at least one communication link.

17. The system according to claim 15, wherein said at least one control unit is a control protocol cell.

18. The system according to claim 16, wherein said at least one communication processing module further retrieves frame information related to said each frame of said plurality of frames of said data, retrieves delay information related to said at least one communication link and creates a delay profile in said at least one buffer using said delay information.

19. The system according to claim 16, wherein said each frame further comprises a predetermined number of data units.

20. The system according to claim 19, wherein each data unit of said predetermined number of data units is a data cell.

21. The system according to claim 15, wherein said buffer is a delay compensated buffer.

22. The system according to claim 15, wherein said at least one state processing module further retrieves said link information after a predetermined period of time determined in a delay profile of said buffer.

23. The system according to claim 18, wherein said at least one state processing module further retrieves said link information after a predetermined period of time determined in said delay profile of said buffer.

24. The system according to claim 22, wherein said link information further comprises information related to deletion of said at least one communication link.

25. The system according to claim 15, wherein said network is an Asynchronous Transfer Mode (ATM) communication network.

26. The system according to claim 15, wherein said at least one communication link is a T1 communication link.

27. The system according to claim 15, wherein said at least one communication link is an E1 communication link.

28. The system according to claim 25, wherein said network enables communication according to an Inverse Multiplexing Asynchronous Transfer Mode (IMA) communication protocol.

29. A computer readable medium containing executable instructions which, when executed in a processing system, cause the system to perform a method comprising:

processing at least one control unit to retrieve communication information related to data received along at least one communication link in a network;

storing said at least one control unit in at least one buffer; and processing said at least one control unit to retrieve link information related to said at least one communication link.

30. The computer readable medium according to claim 29, wherein the method further comprises:

receiving said at least one control unit after each frame of a plurality of frames of said data received along said at least one communication link.

31. The computer readable medium according to claim 29, wherein said at least one control unit is a control protocol cell.

32. The computer readable medium according to claim 30, wherein said processing to retrieve said communication information further comprises:

retrieving frame information related to said each frame of said plurality of frames of said data;

retrieving delay information related to said at least one communication link; and

creating a delay profile in said at least one buffer using said delay information.

33. The computer readable medium according to claim 30, wherein said each frame further comprises a predetermined number of data units.

34. The computer readable medium according to claim 33, wherein each data unit of said predetermined number of data units is a data cell.

35. The computer readable medium according to claim 29, wherein said buffer is a delay compensated buffer.

36. The computer readable medium according to claim 29, wherein said processing to retrieve said link information further comprises:

retrieving said link information after a predetermined period of time determined in a delay profile of said buffer.

37. The computer readable medium according to claim 32, wherein said processing to retrieve said link information further comprises:

retrieving said link information after a predetermined period of time determined in said delay profile of said buffer.

38. The computer readable medium according to claim 36, wherein said link information further comprises information related to deletion of said at least one communication link.

39. The computer readable medium according to claim 29, wherein said network is an Asynchronous Transfer Mode (ATM) communication network.

40. The computer readable medium according to claim 29, wherein said at least one communication link is a T1 communication link.

41. The computer readable medium according to claim 29, wherein said at least one communication link is an E1 communication link.

42. The computer readable medium according to claim 39, wherein said network enables communication according to an Inverse Multiplexing Asynchronous Transfer Mode (IMA) communication protocol.

~~43.~~ A system comprising:

means for processing at least one control unit to retrieve communication information related to data received along at least one communication link in a network;

means for storing said at least one control unit in at least one buffer; and  
means for processing said at least one control unit to retrieve link  
information related to said at least one communication link.

44. The system according to claim 43, further comprising:  
means for receiving said at least one control unit after each frame of a  
plurality of frames of said data received along said at least one communication  
link.
45. The system according to claim 43, wherein said at least one control unit  
is a control protocol cell.
46. The system according to claim 44, further comprising:  
means for retrieving frame information related to said each frame of said  
plurality of frames of said data;  
means for retrieving delay information related to said at least one  
communication link; and  
means for creating a delay profile in said at least one buffer using said  
delay information.
47. The system according to claim 44, wherein said each frame further  
comprises a predetermined number of data units.

48. The system according to claim 47, wherein each data unit of said predetermined number of data units is a data cell.

49. The system according to claim 43, wherein said buffer is a delay compensated buffer.

50. The system according to claim 43, further comprising:  
means for retrieving said link information after a predetermined period of time determined in a delay profile of said buffer.

51. The system according to claim 46, further comprising:  
means for retrieving said link information after a predetermined period of time determined in said delay profile of said buffer.

52. The system according to claim 50, wherein said link information further comprises information related to deletion of said at least one communication link.

53. The system according to claim 43, wherein said network is an Asynchronous Transfer Mode (ATM) communication network.

54. The system according to claim 43, wherein said at least one communication link is a T1 communication link.

55. The system according to claim 43, wherein said at least one communication link is an E1 communication link.

56. The system according to claim 53, wherein said network enables communication according to an Inverse Multiplexing Asynchronous Transfer Mode (IMA) communication protocol.